

# The Dimension of Experience Quality in Agritourism Industry: A Factor Analysis Assessment

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## ABSTRACT

This study aims to examine the experience of agritourism attractions and assess what dimensions are relevant to represent these variables. Literature studies show that limited attention to tourism experiences in the context of agritourism is not discussed in detail about the factors that can cause it. Driven by the gaps identified in the literature, this study attempts to explore the dimensions of the experience of agritourism and the attraction created by agritourism. The experience in agritourism is important, because the characteristics of agritourism are very unique, involving tourists in their activities, therefore it is necessary to study the factors of tourism experience so that this tourism sector remains competitive. A survey was conducted to collect data from six agritourism located in Bandung, Indonesia. The self-administered questionnaire is handed over to visitors to the tourist, the questionnaire uses a 5-point Likert scale. From the questionnaires distributed, 413 were collected and further analysis carried out. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were carried out using SPSS to measure the suitability of dimensions, through the Rotated Component Matrix, each dimension was measured and what dimensions were relevant for measuring tourist experience variables. The results showed that the agritourist experience consists of five dimensions: uniqueness, learning, staff, escape, and peace of mind. The five dimensions are able to explain the variable experience in agritourism. This study broadens understanding of the experiential quality dimensions of theoretical models and is useful for agritourism practitioners in developing strategies to create and maintain high quality experiences.

**Keywords:** Experience quality, agritourism, factor analysis

## 1. INTRODUCTION

The tourism industry is one of the most developed sectors and has a crucial role in socio-economic conditions [1]. One type of tourism attraction is agritourism which can be developed from agricultural activities in rural areas; this type of tourism offers farmers and their local areas to gain extra income and contribute to local economic growth [2]. Tourists are attracted to visit agritourism in rural areas not only for recreational and leisure seeking but also for learning and experiencing new things [3]. Additionally, rural regions with agritourism is believed to be able to create a food system that can improve and ensure economic welfare for the area [4] [5]. Benefits arising from agritourism attractions are considered pivotal for both developed and developing countries [5] [2]. Considering the benefits of agritourism attractions both for agritourists and local areas, thus understanding agritourist experience in the agritourism destinations is crucial for its competitiveness and sustainability.

Agritourism attractions are different with other attractions. In agritourism destinations, tourists are directly involved with activities that take place in the destination [4]. Thus, agritourism attractions provide opportunity for visitors to

engage, learn, experience, and enjoy unique agricultural activities. This involvement has the concept of co-creation which can make agritourism development more interesting and challenging [6]. This agritourism attractions can give opportunities for agritourists to fulfill their novelty-seeking motivation by directly involve themselves in learning and experiencing from nature [7]. Thus, agritourism destination managers should ensure agritourists to have an enjoyable experience during their visit to the destination.

Tourist satisfying experience with the destination is important for both tourist and the destination. Tourist will likely to revisit the destination and recommend the destination to others when they satisfy with their visit and they will have a loyal attitude toward the destination [8]. This tourist loyal attitude will enable agritourism destination to continue to provide an ever-increasing attraction to ensure its competitiveness over other destinations. However, literature appears to be silent with tourist experience in agritourism contexts. Having the fact that tourist satisfying experience with agritourism attractions is important as it can create destination loyalty and sustainability, thus it is worthy to understand the dimensions forming tourist experience in the context of agritourism. Therefore, the purpose of this study is to

identify the dimensionality of tourist experience quality in agritourism attractions. Theoretically, the results of this study will broaden our knowledge about the dimensionality of tourist experiences with agritourism attractions. Practically, the results of this study will help agritourism managers and farmers in developing strategies that are appropriate to create and expand their agritourism appeal through the creation of visitor experience.

## 2. RESEARCH METHODS

Two previous studies similar to the current study are conducted by Srikatanyoo and Campiranon (2010) which examined the accommodation and attractiveness of agritourism[9], and Back et al. (2019) focus on wine

agritourism[6]. Due to the context of this study is different from the previous studies, thus the instrument of tourist experience in this study was developed through focus groups. Three focus groups were carried out ensuing in 22 indicators of tourist experience which later were observed using factor analysis. These 22 indicators were distributed to agritourists who were visiting the agritourism destinations to measure their experience. The variable is measured using a 5-point Likert scale. To ensure that the questionnaire designed was suitable for data collection, an assessment by three tourism academics had been carried out before distributing the questionnaire. The flow in conducting the research is illustrated in Figure 1.

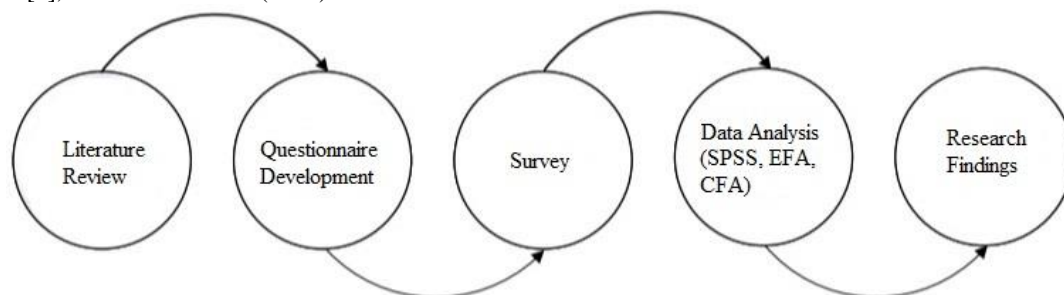


Figure 1. The Flow of the Research

The questionnaires were distributed to six selected agritourism destinations in Bandung, Indonesia from May to July 2019. A total of 491 data were gathered and leaved 413 data are valid for further analysis. To achieve this research objective, two methods of data analysis were used: exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The EFA was carried out using the Principal Component Analysis Method and Varimax with Kaiser Normalization for the rotation method. The CFA was identified through the measurement of construct reliability is calculated by average variance extracted (AVE), and composite reliability (CR) of the instrument. Composite reliability indicates an internal consistency of the variable, the higher number shown the better the consistency of each indicator in measuring the proposed construct. To get a good reliability value the expected CR value should be more than 0.7[10]. The formula used to calculate the composite reliability is:

$$\rho_c = \frac{(\sum \lambda_i)^2 \rho_c}{(\sum \lambda_i)^2 + \sum i \text{ var}(\epsilon_i)} \quad (1)$$

The coefficient  $\lambda_i$  show the number of factor-loading number to the indicator, and  $\text{var}(\epsilon_i) = 1 - \lambda_i^2$ . Average Variance Extracted is used to measure how much variance can be captured by the construct; a good AVE value should be above 0.5. The AVE can be calculated by the formula:

$$AVE = \frac{\sum \lambda_i^2}{\lambda_i^2 + \sum i \text{ var}(\epsilon_i)} \quad (2)$$

The coefficient  $\lambda_i$  show the number of factor-loading number to the indicator, and  $\text{var}(\epsilon_i) = 1 - \lambda_i^2$ .

## 3. RESULTS

The result of the exploratory factor analysis (EFA) of tourist experience quality in agritourism can be seen in table 1 and 2. Table 1 shows the result of KMO and Bartlett's test and table 2 shows the result of the Rotated Component Matrix.

Table 1. Results of KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.890
Bartlett's Test of Sphericity	Approx. Chi-Square	4291.830
	df	231
	Sig.	0.000

Table 1 shows the result of the Kaiser-Meyer-Olkin Measure (KMO) of Sampling Adequacy of this study. The KMO has a significant value of 0.000, Chi-Square 4291,830, degree of freedom 231, and high value of KMO more than 0.50 (0.890) which according to Hair et al.,

(2017) is an acceptable value. This result of KMO and Bartlett's test indicates that there is a correlation between variables and is feasible for further analysis.

Table 2 shows the results of the Rotated Component Matrix method with five new factors formed. The first and second

factors consist of five indicators referred to as the Peace of Mind and the Staff. While the third, fourth, and fifth factors consist of three indicators called Uniqueness, Learning, and Escape. There are three indicators that have a loading factor below the cut-of-value 0.6, namely; 'Easy to access location' which is one of the indicators of Escape dimension, 'suitable activities' and 'get involved with activities' which are indicators of the dimensions of Uniqueness. The three indicators were removed from the factors. Other EFA results obtained from the analysis were Eigen Value, Explained Variance, Cumulative Variance Explained and Cronbach's Alpha.

The total variance that can be explained by these five factors is 63.885%. The first factor is 'Peace of mind' represented by five items that can explain the variance of 33.49%. The second factor can be referred to as 'Staff' because it relates to the competence and friendliness of employees represented by five items resulting in a contribution to the

variance of 10.90%. The third factor 'Uniqueness' which originally consisted of five items can only be represented by three items because two items have a loading factor below 0.6, the Uniqueness Factor can explain the variance of 7.74%. The fourth factor, namely 'Learning' related to learning experiences during the visit, represented by three indicators can explain the variance of 6.183%. The last factor namely 'Escape' is represented by three items because one item did not meet the requirements; this factor gives a contribution to the variance of 5.53%. The overall EFA result of the five factors of tourist experience has a Cronbach Alpha value above 0.7 which indicate a good reliability values [10]. Statistical measurements of Bartlett's sphericity test ( $p < 0.01$ ) and the Kaiser-Meyer-Olkin test (0.890) mean that the samples used in the study are considered to be representative of the population.

**Table 2.** Results of Rotated Component Matrix of Tourist Experience

Indicators	Component				
	Peace Of Mind	Staff	Uniqueness	Learning	Escape
Secure	.794				
Relax	.732				
Comfort	.720				
Safe	.683				
Clean	.657				
Wholeheartedly		.834			
Respect		.815			
Good quality of services		.770			
Friendly		.646			
Knowledgeable		.615			
Difference experience			.814		
New experience			.813		
Unique experience			.771		
Increased Knowledge				.828	
Understand Something new				.813	
Understand local culture				.799	
Could forget daily activities					.797
Felt different from daily life					.742
Escape from daily routine					.741
Eigenvalue	7.638	2.399	1.704	1.360	1.217
Variance explained %	33.493	10.903	7.747	6.183	5.533
Cumulative variance explained %	33.493	44.394	52.142	58.325	63.585
Cronbach's Alpha	0.763	0.784	0.821	0.854	0.804

The next step is conducting Confirmatory Factor Analysis (CFA). The purpose of this analysis is to verify the factor structure of the dimensions that exist in the Experience Quality variable. This analysis is also to ensure that the indicators are part of certain factors and not part of other factors. CFA analysis through the process of calculating Construct Reliability (CR) and Average Variance Extracted (AVE). The CFA results are shown in table 3.

Table 3 shows the items tested using CFA involved five groups of factors consisting of 19 indicators. All of these factors are considered relevant in measuring the Experience Quality variable of agritourism visitors and have a good internal consistency value, this is because the results of the Composite Reliability and Average Variance Extracted meet the criteria of CR higher than 0.7 and AVE above 0.5 [10].

**Table 3.** The Identified Dimensions and its Items

Dimensions and Items	CR	AVE
Peace Of Mind	0.763	0.516
1. Comfort		
2. Relax		
3. Secure		
4. Safe		
5. Clean		
Staff	0.784	0.549
1. Friendly		
2. Knowledgeable		
3. Good quality of services		
4. Wholeheartedly		
5. Respect		
Uniqueness	0.821	0.543
1. Unique experience		
2. New experience		
3. Difference experience		
4. Suitable activities		
Learning	0.854	0.661
1. Increased Knowledge		
2. Understand Something new		
3. Understand local culture		
Escape	0.804	0.578
1. Escape from daily routine		
2. Could forget daily activities		
3. Felt different from daily life		
Note: *All significant at $p < 0.01$		

#### 4. DISCUSSION

The finding of this study reveals that in the context of agritourism attractions the dimensionality of tourist experience has different indicators as not all indicators are valid as the result of the exploratory factor analysis. This study has shown that ‘Easy to access location’ as part of Escape dimension, and ‘suitable activities’ and ‘get involved with activities’ indicators as part of Uniqueness dimension were felled of undercut-of-value. The agritourism destination managers should not take attention on the indicators which are not relevant to build tourist satisfying experiences. Otherwise, attention should be given to the indicators which have high factor loadings value and potentially provide agritourists with satisfying experiences. In the context of this study those indicators and factors are ‘secure environment’ (Peace-of-mind), ‘wholeheartedly’ (Staff), ‘difference experience’ (Uniqueness), ‘increase knowledge’ (Learning) and ‘could forget daily activities’ (Escape).

This study is one of the few studies in the field of agritourism. This study broadens existing research by exploring the factors in the experience of agritourism tourists. This study makes an affirmation of the factors that

can be used to measure experience of agritourism tourists. The factors and indicators under this study are valid and reliable measurement tools as evidenced by the results of statistical calculations. Factors tested in the context of agritourism experience are Peace of Mind, Staff, Uniqueness, Learning, and Escape. These factors extend previous research conducted by Srikanthoo and Campiranon (2010) who examined the accommodation and attractiveness of agritourism, and Back et al. (2019) who examined wine agritourism, by providing empirical evidences in different agritourism research contexts.

This research is different because agritourism research focuses on tourist experiences. Although the factors studied are different, this research remains in the same scope that can provide many contributions for agritourism. In addition, the factors identified in this study have similarities with the study of creative tourism[11]–[13]. The similarities that occur between agritourism and creative tourism are the high involvement, joint creation, and educational value. This happens because some attractions of agritourism are creative tourism in the context of agriculture. The instrument developed in this research is expected to contribute in the form of recommendations and facilitators for subsequent research on tourism experiences, especially

in the scope of agritourism, and the research conducted can provide an expanded understanding of the experience of agritourism tourists.

## 5. CONCLUSION

This study tries to explain the dimensions of agritourism visitors' experiences. From the data analysis, it can be seen that the experience of agritourism visitors consists of five dimensions: Peace of Mind, Staff, Uniqueness, Learning and Escape. The results of statistical calculations provide a signal that the instrument used is reliable and valid to measure the experience of agritourism visitors. This study describes the tourism experience variable in the context of agritourism represented by five dimensions of valid and reliable scale for measuring tourist experience in agritourism contexts.

## ACKNOWLEDGMENT

This study is supported by The Government of Republic Indonesia (Kemenristek/BRIN)  
No.135/SP2H/AMD/LT/DRPM/2020

## REFERENCES

- [1] Kim, Woo, Uysal, "Tourism experience and quality of life among elderly tourists," *Tour. Manag.*, vol. 46, pp. 465–476, 2015.
- [2] A. H. Mohammad Reza Jalilvand, "Comparing face to face and electronic word-of-mouth in destination image formation: the case of Iran," *J. Inf. Technol. People*, vol. 28, no. 1, pp. 2–33, 2015.
- [3] C. Barbieri, "Assessing the sustainability of agritourism in the US: A comparison between agritourism and other farm entrepreneurial ventures," *J. Sustain. Tour.*, vol. 21, no. 2, pp. 252–270, 2013.
- [4] C. Barbieri, K. T. Stevenson, W. Knollenberg, "Broadening the utilitarian epistemology of agritourism research through children and families," *Curr. Issues Tour.*, vol. 22, no. 19, pp. 2333–2336, 2019.
- [5] K. Bhatta, K. Itagaki, Y. Ohe, "Determinant Factors of Farmers' Willingness to Start Agritourism in Rural Nepal," *Open Agric.*, vol. 4, no. 1, pp. 431–445, 2019.
- [6] R. M. Back, A. D. A. Tasci, A. Milman, "Experiential consumption of a South African wine farm destination as an agritourism attraction," *J. Vacat. Mark.*, vol. 26, no. 1, pp. 57–72, 2020.
- [7] L. Joyner, C. Kline, J. Oliver, D. Kariko, "Exploring emotional response to images used in agritourism destination marketing," *J. Destin. Mark. Manag.*, vol. 9, no. January, pp. 44–55, 2018.
- [8] D. Suhartanto, A. Brien, I. Primiana, N. Wibisono, N. Nyoman, "Current Issues in Tourism Tourist loyalty in creative tourism : the role of experience quality , value , satisfaction , and motivation," *Curr. Issues Tour.*, vol. 0, no. 0, pp. 1–13, 2019.
- [9] N. Srikatanyoo, K. Campiranon, "Agritourist needs and motivations: The Chiang Mai case," *J. Travel Tour. Mark.*, vol. 27, no. 2, pp. 166–178, 2010.
- [10] M. Hair, J.F., Hult, G.T.M., Ringle, C., Sarstedt, A. *Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. USA: SAGE Publications Inc, 2017.
- [11] F. Ali, K. Ryu, K. Hussain, "Influence of Experiences on Memories, Satisfaction and Behavioral Intentions: A Study of Creative Tourism," *J. Travel Tour. Mark.*, vol. 33, no. 1, pp. 85–100, 2016.
- [12] W. L. Hung, Y. J. Lee, P. H. Huang, "Creative experiences, memorability and revisit intention in creative tourism," *Curr. Issues Tour.*, vol. 19, no. 8, pp. 763–770, 2016.
- [13] D. Suhartanto, L. Kusdibyo, "Predicting Destination Image in Creative Tourism : A Comparative between Tourists and Residents," *Int. J. Appl. Bus. Res.*, vol. 1, no. 1, pp. 1–15, 2019.